

## REMARKS

### 1. Preliminary Remarks

#### a. Status of the Claims

Claims 23-44 are pending in this application. Claims 23, 25, 26, 30, 31, and 33 are amended; and claims 24 and 41-44 are hereby canceled without prejudice to pursuing the canceled subject matter in a continuing application. Applicant respectfully requests entry of the amendments and remarks made herein into the file history of the application. Upon entry of the amendments, claims 23 and 25-40 will be pending and under active consideration.

#### b. Amendments to the Claims

Support for amended claims 23, 25, 31, and 33 is found in the specification as originally filed at page 19, paragraph 2 through page 20, paragraph 1 (“The reason for this improved performance [of the inventive methods] is that the ligation between the first and the second oligonucleotide and the further oligonucleotide and the elongated oligonucleotide in subsequent rounds of the inventive methods shows a higher yield when **both oligonucleotides are kept in solution rather than one of them being attached to a surface**”) (emphasis added); and at the description of Figure 12 on page 49, paragraph 2. Claims 26 and 30 are amended to no longer depend from claim 24. Since the amended claims find written description support in the application as originally filed, Applicant hereby states that the amendments do not add new matter.

### 2. Patentability Remarks

#### a. 35 U.S.C. § 102

At items 3 and 4 of the Office Action, the Examiner rejects claims 23-44 as allegedly being anticipated by WO 00/75368 (“Schatz” hereafter). Applicant respectfully disagrees. The amended claims relate to methods for making nucleic acids in which oligonucleotides containing type IIS restriction enzyme recognition sites are ligated together **while not being attached to a surface during the ligation**.

The Examiner asserts at item 5, page 15 of the Office Action that the previous claims did not require that both partially double-stranded oligonucleotides be present in solution. Applicant respectfully submits that one of ordinary skill in the art would have interpreted the claims to require that the ligation steps occur in solution, since the **ligation products** are immobilised to a solid surface after the ligation step. A ligation product inherently means that the ligation has already occurred, and thus when a ligation product is immobilised, immobilisation can occur only **after**

ligation. Nevertheless, amended claims 23, 25, 31, and 33 include explicit limitations that the oligonucleotides are not attached to a surface during the ligation, and thus the claims require that both partially double-stranded oligonucleotides are in solution.

In stark contrast, Schatz only teaches a method for making nucleic acids in which oligonucleotides containing type IIS restriction enzyme recognition sites are ligated while at least one of the oligonucleotides is attached to a solid matrix. *See, e.g.*, Schatz at page 2, last paragraph; page 4, first paragraph; page 8, last paragraph; and claim 1. At least one oligonucleotide is always attached to a solid matrix during the ligation step in every variant of the method disclosed in Schatz. Additionally, the Examiner admits that the methods disclosed by Schatz require that at least one of the oligonucleotides is attached to a solid matrix during the ligation step. *See* Office Action at item 5, page 15 (“The Examiner agrees that Schatz teaches immobilization of the anchor oligo prior to ligation to the splinker oligo”). Since Schatz does not teach or suggest performing ligation of the partially double-stranded nucleotides in solution, this reference does not anticipate the subject matter of the amended claims. In view of the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of the claims under 35 U.S.C. § 102(b).

### 3. Conclusion

Applicant respectfully submits that the instant application is in good and proper order for allowance and early notification to this effect is solicited. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the instant application, the Examiner is encouraged to call the undersigned at the number listed below.

Respectfully submitted,

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